SOME ANALYSES OF SPOILED SILAGE

W. G. Friedemann, 1917.

The analysis of spoiled silage is different from that of normal silage in the percentage of nitrogen, ash, and water-soluble acids. The per cent of fiber, nitrogen-free extract and ether extract is not given as it is only slightly lower in spoiled silage compared to normal silage.

The nitrogen is higher in spoiled silage because decomposition has set in which was probaly caused by acrobic ammonifying or nitrifying micro-organisms

The ash content of spoiled silage is higher than that of normal silage showing that destruction of organic matter has taken place in spoiled silage.

The per cent of water soluble acids is considerable lower in spoiled silage as compared to that of normal silage. In one sample of spoiled cane silage 89.32 per cent of the volatile acids was acetic acid. 9.25 per cent formic acid and 1.43 per cent butyric acid. Spoiled silage differs in the percent of those feeding constitutents from normal silage which are materially affected by acrobic (access to air) conditions or micro-organisms.

Analysis of Silages—(Water-free Basis)

	Darso		Texas Seeded Ribbon Cane		Orange Cane		Sudan Grass	
	Spoiled	Normal	Spoiled	Normal	Spoiled	Normal	Spoiled	Normal
Age (days)	LL9	131	145	191	224	225	192	181
Dray matter Per Cent	33.18	36.79			23.54	27.33	24.28	24.29
Ash Per Cent	13.98.	6.77	7.66	5.93	0.16.	5.40	8.95	5.15
acid Per Cent Calculated as lactic Water soluble Acids	6.17	3.00			5.33	1.97	5.10	1.67
Protein % Nitrogen	13.02	10.38	8.75	8.54	9.33	5.24	10.94	8.33
Remarks	From Top	Below spoiled silage	From edges	Five feet lower down	From Top	Below spoiled silage	From edges	Away from edges at same level